Cisco 7816-I5 Media Convergence Server

Cisco® Unified Communications Solutions unify voice, video, data, and mobile applications on fixed and mobile networks, enabling easy collaboration every time from any workspace.

Product Overview

Cisco Unified Communications is a comprehensive IP communications system of voice, video, data, and mobility products and applications. It enables more effective, more secure, more personal communications that directly affect both sales and profitability. It brings people together by enabling a new way of communicating - where your business moves with you, security is everywhere, and information is always available...whenever and wherever it is needed. Cisco Unified Communications is part of an integrated solution that includes network infrastructure, security, mobility, network management products, lifecycle services, flexible deployment and outsourced management options, end-user and partner financing packages, and third-party communications applications.

The Cisco MCS 7816-I5 is an entry-level server platform used for Cisco Unified Communications Solutions. An integral part of a complete, scalable architecture for a new generation of high-quality IP voice solutions that run on enterprise data networks, the Cisco MCS 7816-I5 is an easily deployed, cost-effective solution that delivers the high performance and availability demanded by today's enterprise networks. At only 1 rack unit (1RU) high, the Cisco MCS 7816-I5 offers tremendous power in a low-profile chassis that minimizes rack space.

Supported Cisco Applications

- Cisco Unified Application Environment
- Cisco Unified Communications Manager
- Cisco Emergency Responder
- Cisco Unified Contact Center Express
- Cisco Unified IP Interactive Voice Response (IP IVR)

Key Features and Benefits

Product Specifications

Table 1 lists the components of the Cisco MCS 7816-I5 Media Convergence Server, and Table 2 gives information about equipment approvals and safety.

Table 1. Cisco MCS 7816-I5 Configuration

Component	Value
Product part number	MCS-7816-I5-CCX1 MCS-7816-I5-IPC1 MCS7816I5-K9-CMD2 MCS7816I5-K9-CXA1
Preload	None
OS included	None
Processor	Single Intel x3430 quad-core 2.40-GHz; last level cache: 8 MB
Memory included	4-GB (two 2-GB dual in-line memory module [DIMM]) dual-rank PC3-10600R-999 1333 MHz, fully buffered double data rate 3 (DDR3) registered DIMM (RDIMM)

© 2010 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.

Component	Value	
Memory maximum	32 GB	
Memory bus clock	Up to 1333 MHz	
Memory technology	Registered PC3-10600 DDR3 1333-MHz dual-rank DIMM	
Multibit error mitigation	Error Checking and Correcting (ECC)	
Total DIMM slots	Six	
Basic input/output system (BIOS) type	United Extensible Firmware Interface (UEFI)	
Hard disks	One 250-GB Serial Advanced Technology Attachment (SATA) 3.5-in. simple swap	
Simple swap bays	Two	
Hard disk interface type	SATA	
Hard disk spindle speed	7,200 rpm (revolutions per minute)	
Hard disk seek time	11.9 ms (average)	
Hard disk latency	4.2 ms (nominal)	
Data-transfer rate	Capable of 3 Gbps	
Hard disk form size	3.5-inch small form factor (SFF)	
Redundant Array of Independent Disks (RAID) controller model	-	
RAID interface	-	
RAID cache	-	
Battery-backed write cache (BBWC)	-	
RAID level	-	
Ethernet network interface card (NIC)	Dual onboard 10/100/1000	
Ethernet connectors	Two RJ-45 connectors on back of server	
10BASE-T cable support	EIA Category 3, 4, or 5 unshielded twisted pair (UTP) (2 or 4 pair) up to 328 ft (100m)	
100BASE-TX cable support	EIA Category 5 UTP (2 pair) up to 328 ft (100m)	
1000BASE-T cable support	EIA Category 6 UTP (recommended), 5E UTP, 5 UTP (2 pair) up to 328 ft (100m)	
Serial ports	1	
Parallel ports	0	
USB 2.0 ports	7 (2 front, 4 rear, and 1 internal)	
Keyboard ports	Use one of the USB ports (PS/2 ports are not provided)	
Mouse ports	Use one of the USB ports (PS/2 ports are not provided)	
Audio ports	None	
Video Graphics Array (VGA) ports	One rear	
System management ports	Shared Ethernet port	
Eight PCIe non-hot plug slots	Two	
Dimensions (H x W x D)	Height: 1.69 in. (1RU)	Height: 43 mm
	Width: • 17.32 in.	Width: • 440 mm.
	Depth: • Overall: 22 in	Depth: • Overall: 559 mm
Weight (maximum)	28 lb	12.7 kg
Input requirements*	Rated line voltage: 100-127 VAC; 50 or 60 Hz	
	Input current (amps)	0.58 (idle) 1.53 (maximum measured) 6.0 (system rated) 40 (peak inrush current; 4 ms)

© 2010 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.

Component	Value	
	Leakage current (mA)	0.47 (idle; maximum measured; system rated)
	Power (watts)	68 (idle) 174 (maximum measured) 351 (system rated)
	VA rating (VA)	70 (idle) 178 (maximum measured) 351 (system rated)
	BTU rating (BTU/hr)	232 (idle) 594 (maximum measured) 2047 (system rated)
	Rated line voltage: 200-240 VAC; 50 or 60 Hz	
	Input current (amps)	0.33 (idle) 0.82 (maximum measured) 3.0 (system rated) 40 (peak inrush current; 4 ms)
	Leakage current (mA)	0.47 (idle; maximum measured; system rated)
	Power (watts)	67 (idle) 171 (maximum measured) 351 (system rated)
	VA rating (VA)	68 (idle) 175 (maximum Measured) 351 (system rated)
	BTU rating (BTU/hr)	229 (Idle) 583 (maximum Measured) 2047 (system rated)
Power supply output power	Rated steady-state power	351W
Temperature range	Operating	50 to 95°F (10 to 35°C) at 0-3000 ft (0-914.4m) with an altitude de-rating of 1.4°F (0.75°C) per 1000 ft (304.8m)
	Nonoperating	50 to 109.4°F (10 to 43°C)
	Shipment	-104 to 140°F (-40 to 60°C)
Relative humidity (RH; noncondensing)	Operating Shipment	8 to 80% 8 to 80%
Maximum altitude	7000 ft	2133m
Acoustic noise	Operating minimum	L WAd (bels) 6.5
Airflow (cubic feet per minute [cfm])	20 cfm minimum	31 cfm maximum
Remote management	IBM Integrated Management Module included (user-installable Virtual Media Key available) on a shared Ethernet connector	

* Maximum measured values were determined with 77°F (25°C) ambient temperature, and your results may va ry.
* Idle power: Power drawn with the machine(s) logged into the OS, and no other applications running. Memory, HDDs, optical drives, and tape drives are not being used.
* Measured maximum power: Maximum measured power is the power drawn by the machine with the CPUs 100-percent used and memory is used 10 percent more than base usage. The exerciser used is Prime95 (torture test). You can download it at http://www.mersenne.org.
* Rated system maximum: The maximum power the machine can draw according to the system label rating.

Table 2. Equipment Approvals and Safety

Equipment Approvals and Safety

© 2010 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.

Equipment Approvals and Safety
• FCC - Verified to comply with Part 15 of the FCC Rules, Class A • ICES-003 Class A • AS/NZS CISPR22 Class A • CISPR22 Class A • CISPR24 Class A • EN55022 Class A • EN55024 • IEC 61000-3-2 • IEC 61000-3-3 • KN22 Class A • CNS13438 Class A • GB9254 Class A • GB4943 • VCCI-03 Class A • CSA C22.2 No. 60950-1-07 • UL 60950-1 2nd Edition • IEC/EN 60950-1 2nd Edition • CE Mark (Low Voltage Directive 2006/95/EC, EMC Directive 2004/108/EC • KN24

Ordering Information

Tables 3 through 5 give ordering information for the Cisco MCS 7816-I5.

Table 3. Ordering Information

Product Name	Part Number
Cisco Unified Application Environment	See Cisco Unified Application Environment data sheet
Cisco Unified Communications Manager	See Cisco Unified Communications Solutions Ordering Guide
Cisco Emergency Responder	See Emergency Responder datasheet
Cisco Unified Presence	See Unified Presence datasheet
Cisco Unified Contact Center Express	See Contact Center Ordering Guide
Cisco Unified IP IVR	See Contact Center Ordering Guide

Table 4. Spare Server Ordering Information

Product Name	Part Number
Cisco MCS 7816-I5 for Cisco Unified Application Environment	MCS-7816-I5-IPC1
Cisco MCS 7816-I5 for Cisco Emergency Responder	MCS-7816-I5-IPC1
Cisco MCS 7816-I5 for Cisco Unified Communications Manager	MCS-7816-I5-IPC1 MCS7816I5-K9-CMD2
Cisco MCS 7816-I5 for Cisco Contact Center Express	MCS-7816-I5-CCX1 MCS7816I5-K9-CXA1
Cisco MCS 7816-I5 for Cisco Unified IP IVR	MCS-7816-I5-CCX1 MCS7816I5-K9-CXA1
Cisco MCS 7816-I5 for Cisco Unified Presence	MCS-7816-I5-IPC1
Cisco MCS 7816-I5 for Cisco Unified Mobile Communicator 3.0, Proxy Server	MCS-7816-I5-IPC1

Table 5. Spare Parts Ordering Information

Description	Spare Part Number
Spare 2GB DIMM for MCS 7816/25/28-I5	MEM-78xx-I5-2GB=
Spare 250GB Hard Disk Drive for MCS 7816/25/28-I5	HDD-78xx-I5-250=

© 2010 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.

Warranty Information

Cisco offers a 1-year limited hardware warranty on Cisco Media Convergence Servers. For terms and conditions of this warranty, refer to http://www.cisco.com/en/US/docs/general/warranty/English/1Y1DEN__.html.

Cisco Unified Communications Services

Cisco Unified Communications Services allows you to accelerate cost savings and productivity gains associated with deploying a secure, resilient Cisco Unified Communications Solution. Delivered by Cisco and our certified partners, our portfolio of services is based on proven methodologies for unifying voice, video, data, and mobile applications on fixed and mobile networks. Our unique lifecycle approach to services can enhance your technology experience to accelerate true business advantage.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at **www.cisco.com/go/offices.**

Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1005R)

Printed in USA C78-635693-00 12/10

© 2010 Cisco and/or its affiliates. All rights reserved. This document is Cisco Public Information.